

REMARKS

The application has been amended and is believed to be in condition for allowance.

Claims 11-14, 17, 19 and 20 have been allowed.

Claim 11 is amended to correct a typographic error.

Claim 9 was indicated to be directed to allowable subject matter.

Claims 1-8 were rejected under §112, second paragraph, for not reciting "electrical contacts to feed electric current through the sheet material".

Applicant understands this rejection has been withdrawn; however, clarification is requested.

Although the specification discloses that the inventive frame can be used for electrochemical treatment, the invention more generally is directed to a frame for holding a metal sheet material taut.

This aspect of the invention is what is recited in the preamble of claim 1. Also see the first sentence of specification page 1. Also see the first aim of the invention beginning on line 20 of specification page 1.

There is an embodiment of the invention which uses the electrical contacts on the frame to feed electric current through the sheet material, and that embodiment is recited by claim 10.

Thus, each embodiment is recited. This approach is proper under §112, second paragraph.

Reconsideration and withdrawal of this rejection is solicited.

Claims 1-8 are anticipated by SIEGEL 3,826,483.

SIEGEL does not anticipate as SIEGEL does not provide a frame that holds a metal sheet material taut, the metal sheet material being fixed thereto. The Advisory Action indicates that SIEGEL does disclose a structure capable of holding a metal sheet taut.

This is incorrect.

Claim 1 requires "on which legs fixing means, provided on the legs, for fixing, each one of the opposing edges of a piece of metal sheet material thereto,".

SIEGEL does not disclose fixing means that fix each one of the opposing edges of a piece of metal sheet material to the legs.

The Official Action takes the position that "taut" means "tight". This is not the meaning of "taut" that the present specification has provided. The claims must be interpreted consistent with the meanings given by the specification.

See published application paragraph [0004] disclosing that the frame with the sheet is placed vertically in the bath, and to prevent the relatively thin sheet sagging during this operation it must be held taut in the frame. The tensile pretension resulting from pretensioning must be maintained

throughout the entire electrolysis process. However, this cannot always be guaranteed, The tensile pretension decreases as a result and can even be completely lost. The sheet will consequently start to sag, which can lead to damage and creasing.

Next see paragraph [0006] disclosing that when the taut sheet becomes warmer during the treatment the tensile pretension therein can nevertheless be maintained by the action of the compensation means. These can be constructed in various ways. ..., such as, for example, with motorised means for holding taut that are controlled by a tension sensor.

Paragraph [0018] discloses that during the electrolytic treatment of the sheet expansion follows. However, it is important that the sheet remains taut under tensile pretension between the legs 2, 3 and for this purpose the compensation means indicated in their entirety by 12 are provided.

Lastly, see paragraph [0022] disclosing that should the sheet become warm and stretch under the influence of the treatment process, the tensile force produced by the spring 18 can still be maintained in the sheet because the leg 3 is able to move somewhat under the influence of the spring pretension. The movement path must be sufficiently long that the head 20 does not make contact with the lip 19.

Claim 1 has been amended consistent with these disclosures and to leave no doubt as to the meaning of the term "taut".

In the claimed invention, the metal sheet is fixed to each leg individually, so that a tensile force can be applied to the metal sheet. Holding a sheet material taut (claim 1) means holding the sheet material tight under a tensile force. In the invention, since the metal sheet is fixed, at the opposing edges to the legs, even if the tensile force is removed, the metal sheet remains individually fixed to each leg in the frame.

In SIEGEL, a planar work piece (plate-like electronic circuit board) is held in fixation between the arms of the holder under a compressive force (in V-grooves in the arms), as long as the compressive force is present. The planar work piece is not individually fixed to the arms, so that the work piece will fall out of fixation by the holder when the compressive force is removed.

Thus, the structure of SIEGEL is not capable of meeting the claim 1 recitations of conveying a tensile force from the arms of the holder to the planar work piece, the piece being fixed thereto.

Indeed, SIEGEL gives no indication whatsoever that products being handled should be pulled. SIEGEL consistently refers to the step of compressively clamping the circuit board in the V-shaped slots 30, 32, and 34. This is done by means of compression springs 46 (column 2, lines 20-21).

As previously discussed, the claims require holding a metal sheet material taut, on which legs fixing means are

provided for fixing, each one of the opposing edges of a piece of metal sheet material thereto so that the sheet is held taut under a tensile pretension, wherein compensation means are provided to compensate for stretch and/or shrinkage of the piece of sheet material fixed between the legs to hold the sheet taut under a tensile pretension, the compensation means comprising a spring member, one end of which is able to bear on a fixed point on the support and the other end of which interacts with the movable leg.

Additionally, see that claim 1 requires a support, exactly two legs which extend essentially parallel to one another transversely from the support, and that the compensation means comprise a spring member, one end of which is able to bear on a fixed point on the support and the other end of which interacts with the movable leg.

Thus, in the present invention, the spring member is able to bear on a fixed point on the support and, with respect to the support, the legs extend essentially transversely. SIEGEL does not disclose this structure. Rather, springs 46 bear on the fixed leg 40, which is however parallel to the movable leg 42 and not transversely oriented with respect to the fixed leg.

Accordingly, there is no anticipation.

Reconsideration and allowance of claim 1 and its dependent claims are respectfully requested.

New claims 21-22 respectively recite that the two legs

each further have tensile clamps for clamping the piece of sheet material, and that the two legs each further have stretching clamps for clamping the piece of sheet material.

These recitations find support in the passages discussed above and in page 3, lines 1, 2 and 20. Therefore no new matter is entered by way of these amendments.

These features further distinguish the invention from SIEGEL as SIEGEL does not teach or suggest such clamps.

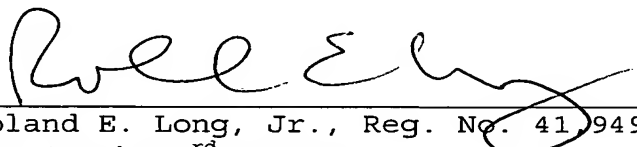
Allowance of all claims is solicited.

Applicant believes the present application is in condition for allowance and an early indication of the same is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



Roland E. Long, Jr., Reg. No. 41,949
745 South 23rd Street
Arlington, VA 22202
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

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